

IN THE CLAIMS:

The text of all pending claims is set forth below. As listed below, the claims show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 1 and 19-76 and add the following new claims in accordance with the following:

1-76 (cancelled)

77. (new) A method of communicating information across a plurality of paths, wherein each path of said plurality of paths begins near a first point and terminates near a second point, and each path of said plurality of paths is a 2-wire conductive path, the method comprising:

converting a first stream of digital data into a plurality of sub-streams, wherein

(a) each sub-stream of said plurality of sub-streams is a stream of digital data,

(b) the number of sub-streams is equal to the number of paths in said plurality of paths,

(c) the information content of each sub-stream in said plurality of sub-streams includes a different part of the information in said first stream of digital data, and

(d) the data rate of each sub-stream is less than the data rate of said first stream of digital data,

encoding each sub-stream in said plurality of sub-streams into a different one of a plurality of downstream signals, wherein substantially all of the power spectrum of each of said plurality of downstream signals is above 3 KHz;

transmitting each one of said plurality of downstream signals onto the first end of a different one of said plurality of paths, wherein said first end is located near said first point;

receiving one of said plurality of downstream signals from the second end of each of said plurality of paths, wherein said second end is located near said second point;

recovering one of said plurality of sub-streams from each one of said plurality of downstream signals;

creating a first recreated stream of digital data from the plurality of sub-streams recovered from said plurality of downstream signals, wherein the first recreated stream of digital data is substantially identical to said first stream of digital data;

including, as part of the first recreated stream of digital data, a field of bits identifying an electronic device that will receive at least part of said first recreated stream of digital data;

and

wherein said receiving of a first one of said plurality of downstream signals from a first one of said plurality of paths includes

- (a) receiving while presenting a high impedance to signals within the telephone voiceband; and
- (b) receiving voiceband signals from said first one of said plurality of paths while presenting a high impedance to signals above voiceband, and
- (c) conversion of said voiceband signals into sound.

78. (new) The method of claim 77 further including transmission of power across at least two of the wires in said plurality of paths.

79. (new) The method of claim 78 further including the use of said power by electronic circuitry that performs said recovering and creating.

80. (new) The method of claim 77 further including encoding said first recreated stream of digital data into an analog signal using Manchester coding.

81. (new) The method of claim 77 further including encoding said first recreated stream of digital data according to the 100BaseT standard.

82. (new) The method of claim 77 wherein said field of bits is a field of 48 digits.